IN THE CLAIMS

Claim 1 (currently amended): A display timing generator for generating timing associated with component video signals in a desired display format, the display timing generator comprising:

a programming interface operative to allow a user to select <u>different</u> line types for different lines in a frame and one or more timing parameters associated with a corresponding line type; and

a signal generator operative to receive digital video data and provide the selected line types and timing associated with the selected one or more different timing parameters for the different lines in a frame, the selected line types and timing associated with the selected one or more timing parameters being insertable into digital component video signals to provide a desired display format.

Claim 2 (original): The display timing generator of claim 1, the one or more timing parameters being user programmable and comprising pulse widths and amplitude levels of horizontal synchronization signals.

Claim 3 (original): The display timing generator of claim 1, the one or more timing parameters being associated with excursions of the line types.

Claim 4 (original): The display timing generator of claim 1, the programming interface operative to create a line type table which the signal generator utilizes to provide the desired display format.

Claim 5 (original): The display timing generator of claim 1, the programming interface operative to allow a user to select from a set of pre-stored line types and associated timing parameters.

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Claim 6 (original): The display timing generator of claim 5, the set of pre-stored line types comprising high definition television line types and standard definition television line types.

Claim 7 (original): The display timing generator of claim 1, the programming interface operative to allow a user to create custom line types and timing associated with the custom line types in a generic mode.

Claim 8 (original): The display timing generator of claim 1, further comprising a state machine that monitors the time duration of video lines and the rise and fall time of the video lines.

Claim 9 (original): The display timing generator of claim 1, the display timing generator being operative to receive and provide dedicated horizontal and vertical synchronization signals.

Claim 10 (original): The display timing generator of claim 1, being integrated into a component video and personal computer graphics digital-to-analog converter system.

Claim 11 (original): The display timing generator of claim 10, the component video and personal computer graphics digital-to-analog converter system being an integrated circuit.

Claim 12 (original): The display timing generator of claim 1, the line types comprising at least one of tri-level synchronization signals and bi-level synchronization signals.

Claim 13 (original): The display timing generator of claim 1, the line types defining rise and fall times, synchronization shapes and horizontal and vertical timings for providing a desired display format.

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Claim 14 (original): The display timing generator of claim 1, the display timing generator having a master timing mode that imposes a user defined video display timing format onto a video source and a slave timing mode that slaves synchronization to a source video format.

Claim 15 (original): The display timing generator of claim 14, the display timing generator being programmable to select between the master timing mode and the slave timing mode.

Claim 16 (original): The display timing generator of claim 1, the display timing generator being programmable to select between providing dedicated synchronization signals and embedded synchronization signals.

Claims 17-25 (cancelled)

Claim 26 (original): A method for providing timing associated with digital component video, the method comprising:
storing a set of line types and timing parameters associated with the line types;
providing a display timing generator with a programming interface, the programming interface being adapted to allow a user to select between the set of line types and associated timing parameters; and
creating a line type table that provides the display timing generator with the selected line types and associated timing parameters when receiving component video data, so that the display timing generator can provide the selected line types and associated timing parameters to the component video data.

Claim 27 (original): The method of claim 26, the line types comprising high definition television line types and standard definition television line types.

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Claim 28 (original): The method of claim 26, further comprising providing the programming interface with a generic mode that allows a user to create custom line types and associated timing parameters.

Claim 29 (cancelled)